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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/887,824

06/22/2001

John Reader Hubbell

05222.00145

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06/06/2006

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EXAMINER

STARKS, WILBERT L

ART UNIT

PAPER NUMBER

2129

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant No.

09/887,824

Applicant(s)

HUBBELL ET AL.

Examiner

Wilbert L. Starks, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 19-27 and 37-45 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9, 19-27 and 37-45 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

Claims 1-9, 19-27, and 37-45 have been examined.

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. §101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the invention as disclosed in claims 1-9, 19-27, and 37-45 is directed to non-statutory subject matter.

2. Regardless of whether any of the claims are in the technological arts, none of them is limited to practical applications in the technological arts. Examiner finds that *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) controls the 35 USC §101 issues on that point for reasons made clear by the Federal Circuit in *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir. 1999). Specifically, the Federal Circuit held that the act of:

...[T]aking several abstract ideas and manipulating them together adds nothing to the basic equation. *AT&T v. Excel* at 1453 quoting *In re Warmerdam*, 33 F.3d 1354, 1360 (Fed. Cir. 1994).

Examiner finds that Applicant's "goal" references are just such abstract ideas.

3. Furthermore, Applicant has amended the language to recite: "...the goal being **associated** with a training objective of a student." The word "associated" is undefined and it is unclear whether this word limits the claims to statutory subject matter. Applicant asserts that the "training objective of a student" "limitation" makes the claims statutory, but it is unclear what this phrase has to do with the invention beyond a vague "association" with it. Is the association a close one where the goal is the "training objective", or is it a loose one where they were simply made or considered at the same time...or even just some mental association. Applicant's added phraseology does not clarify these issues and does not limit the claim to statutory subject matter. As such, it makes the disclosure nonstatutory in nature.

4. Further, in claim 10, Applicant recites that the "feedback" or display of information "motivates" accomplishment of a goal. "Motivation" is a human thought and the inclusion of it does not make the invention statutory. Patents are not available for persuasive speech or persuasive information displayed to a user. Such things do not define a composition of matter, apparatus, method, or product of manufacture. They are simply non-functional data not embodied on any medium.

5. Examiner bases his position upon guidance provided by the Federal Circuit in *In re Warmerdam*, as interpreted by *AT&T v. Excel*. This set of precedents is within the same line of cases as the *Alappat-State Street Bank* decisions and is in complete agreement with those decisions. *Warmerdam* is consistent with *State Street's* holding that:

Today we hold that *the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price*, constitutes a practical application of a mathematical algorithm, formula, or calculation because it produces 'a useful, concrete and tangible result' -- *a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.* (emphasis added) *State Street Bank* at 1601.

6. True enough, that case later eliminated the “business method exception” in order to show that business methods were not per se nonstatutory, but the court clearly *did not* go so far as to make business methods *per se* statutory. A plain reading of the excerpt above shows that the Court was *very specific* in its definition of the new *practical application*. It would have been much easier for the court to say that “business methods were per se statutory” than it was to define the practical application in the case as “...the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price...”

7. The court was being very specific.

8. Additionally, the court was also careful to specify that the “useful, concrete and tangible result” it found was “a final share price momentarily fixed for recording purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.” (i.e. the trading activity is the further practical use of the real world monetary data beyond the transformation in the computer – i.e., “post-processing activity”.)

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9. Applicant cites no such specific results to define a useful, concrete and tangible result. Neither does Applicant specify the associated practical application with the kind of specificity the Federal Circuit used.
10. Furthermore, in the case *In re Warmerdam*, the Federal Circuit held that:

...[T]he dispositive issue for assessing compliance with Section 101 in this case is whether the claim is for a process that goes beyond simply manipulating 'abstract ideas' or 'natural phenomena' ... As the Supreme Court has made clear, '[a]n idea of itself is not patentable, ... *taking several abstract ideas and manipulating them together adds nothing to the basic equation.* *In re Warmerdam* 31 USPQ2d at 1759 (emphasis added).

11. Since the Federal Circuit held in *Warmerdam* that this is the “dispositive issue” when it judged the usefulness, concreteness, and tangibility of the claim limitations in that case, Examiner in the present case views this holding as the dispositive issue for determining whether a claim is “useful, concrete, and tangible” in similar cases. Accordingly, the Examiner finds that Applicant manipulated a set of abstract “goals” to solve purely algorithmic problems in the abstract (i.e., what *kind* of “goal” is used? Algebraic word problems? Boolean logic problems? Fuzzy logic algorithms? Probabilistic word problems? Philosophical ideas? Even vague expressions, about which even reasonable persons could differ as to their meaning? Combinations thereof?) Clearly, a claim for manipulation of “goals” is provably even more abstract (and thereby less limited in practical application) than pure “mathematical algorithms” which the Supreme Court has held are per se nonstatutory – in fact, it *includes* the expression of nonstatutory mathematical algorithms.

12. Since the claims are not limited to exclude such abstractions, the broadest reasonable interpretation of the claim limitations includes such abstractions. Therefore, the claims are impermissibly abstract under 35 U.S.C. 101 doctrine.

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13. Since *Warmerdam* is within the *Alappat-State Street Bank* line of cases, it takes the same view of “useful, concrete, and tangible” the Federal Circuit applied in *State Street Bank*. Therefore, under *State Street Bank*, this could not be a “useful, concrete and tangible result”. There is only manipulation of abstract ideas.

14. The Federal Circuit validated the use of *Warmerdam* in its more recent *AT&T Corp. v. Excel Communications, Inc.* decision. The Court reminded us that:

Finally, the decision in *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) is not to the contrary. \*\*\* The court found that the claimed process did nothing more than manipulate basic mathematical constructs and concluded that ‘taking several abstract ideas and manipulating them together adds nothing to the basic equation’; hence, the court held that the claims were properly rejected under §101 ... Whether one agrees with the court’s conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under §101. (emphasis added) *AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447, 1453 (Fed. Cir. 1999).

15. Remember that in *In re Warmerdam*, the Court said that this was the dispositive issue to be considered. In the *AT&T* decision cited above, the Court reaffirms that this is the issue for assessing the “useful, concrete, and tangible” nature of a set of claims under 101 doctrine. Accordingly, Examiner views the *Warmerdam* holding as the dispositive issue in this analogous case.

16. The fact that the invention is merely the manipulation of *abstract ideas* is clear. The data referred to by Applicant’s word “goal” is simply an abstract construct that does not limit the claims to the transformation of real world data (such as monetary data or heart rhythm data) by some disclosed process. Consequently, the necessary conclusion under *AT&T*, *State Street* and *Warmerdam*, is straightforward and clear. The claims



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take several abstract ideas (i.e., "goals" in the abstract) and manipulate them together adding nothing to the basic equation. Claims 1-9, 19-27, and 37-45 are, thereby, rejected under 35 U.S.C. §101.

### ***Claim Rejections - 35 USC § 112***

17. The following is a quotation of the first paragraph of 35 U.S.C. §112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

18. Claims 1-17 and 19-54 are rejected under 35 U.S.C. §112, first paragraph because current case law (and accordingly, the MPEP) require such a rejection if a §101 rejection is given because when Applicant has not in fact disclosed the practical application for the invention, as a matter of law there is no way Applicant could have disclosed *how* to practice the *undisclosed* practical application. This is how the MPEP puts it:

("The how to use prong of section 112 **incorporates as a matter of law** the requirement of 35 U.S.C. 101 that the specification disclose as a matter of fact a practical utility for the invention.... If the application fails as a matter of fact to satisfy 35 U.S.C. § 101, then the application also fails as a matter of law to enable one of ordinary skill in the art to use the invention under 35 U.S.C. § 112."; In re Kirk, 376 F.2d 936, 942, 153 USPQ 48, 53 (CCPA 1967) ("Necessarily, compliance with § 112 requires a description of how to use presently useful inventions, **otherwise an applicant would anomalously be required to teach how to use a useless invention.**"). See, MPEP 2107.01(IV), quoting In re Kirk (emphasis added).

Therefore, claims 1-9, 19-27, and 37-45 are rejected on this basis.

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19. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

20. Claims 1-9, 19-27, and 37-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

21. Specifically, Applicant has amended the language to recite: "...the goal being associated with a training objective of a student." The word "associated" is undefined and it is unclear whether this word limits the claims to statutory subject matter. Applicant asserts that the "training objective of a student" "limitation" makes the claims statutory, but it is unclear what this phrase has to do with the invention beyond a vague "association" with it. Is the association a close one where the goal is the "training objective", or is it a loose one where they were simply made or considered at the same time...or even just some mental association. Applicant's added phraseology does not limit the claim to statutory subject matter and makes the disclosure vague in that it fails to particularly point out and distinctly claim the subject matter which Applicant regards as the invention under 35 U.S.C. 112 doctrine.

### ***Response to Arguments***

Applicant's arguments filed 03/13/2006 have been fully considered but they are not persuasive. Specifically:

#### **Argument 1**

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Regarding the §101 rejections, Applicant acknowledges the Examiner's withdrawal of arguments (corresponding to Arguments 1 and 2 presented by the Office Action on pages 10-11) regarding whether the claims are practiced on a computer. Because the §101 issues raised in paragraphs 1-18 of this Office Action reiterate the issues presented in the previous office action dated July 27, 2005, Applicant is basing this paper on a response to new issues presented in this Office Action that correspond to Arguments 3-14 (pages 11-21).

Because the §112 issues raised in paragraphs 19-23 of this Office Action reiterate the issues presented in the previous office action dated July 27, 2005, Applicant is basing this paper on a response to new issues presented in this Office Action that correspond to Arguments 15-16 (pages 21-24).

There are no new issues of fact or law in this case.

Applicant has amended only one claim since July of 2004 and has not filed a CIP.

Therefore, there are no new issues of fact that Applicant's response can be addressing.

Further, the rejections are the same...that Applicant has not presented limitations on the claims to practical applications. Therefore, there are no new issues of law. The statement by Applicant is erroneous.

### Argument 2

Applicant is amending claim 1 to include the features of "receiving a goal, the goal in a specific task being associated with a training objective of a student in a business simulation application," integrating information that motivates accomplishment of the goal by the student," and "adjusting the feedback based on progress of the student toward the goal to help the student complete a **business deliverable**." (Emphasis added.) Claim 19 is amended to include the similar features of presenting information indicative of a **goal**, the goal in a specific task being associated with a **training objective** of a student in **business simulation application**," "integrating information that motivates accomplishment of the goal by the user in a -simulated environment goal for use in the presentation," and monitoring progress toward the goal and providing feedback that further motivates accomplishment of the goal in the simulated \*\*\* plurality of students, into a tutor for use in the presentation," and "providing feedback that further assists the plurality of students in accomplishing the goal to help the plurality of students

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complete a **business d liverable**." (asterixes added because that line in the FAX is unreadable.)

None of these additions is a limitation to a practical application...they are merely abstract references to myriad unspecified (i.e., unlimited) practical applications. The abstract reference to a "goal" does not limit the claims to any specific type of goal. (e.g., winning a game, completing a negotiation, acquiring a certain amount of money, etc.) likewise, the words "training objective" do not limit to a practical application either. Is it training for flying a plane? For running a nuclear plant? For winning a game? There are no limitations to specify this. Each of these is a different invention where the only thing they have in common is the underlying algorithm that Applicant seeks to patent. Further, a "business deliverable" is not statutory either. There is no limitation making sure that the deliverable is data representing the real world...much less within public policy. Applicant's claims are so abstract, that applications of the algorithm that are against public policy are within the claim scope...there is no guarantee that the "business deliverable is even legal with respect to criminal statutes. If Applicant had specified that the "business goal" is, for instance, completing certain stock broker tasks like analyzing a market and making an accurate recommendation to a client as to whether to spend discrete dollar values on some stocks....then yes, there would be a limitation that clarified whether the invention is statutory...or even whether it is against public policy.

Applicant has not, as of yet added, statutory limitations to the claims, so the claims remain non-statutory and the rejections of those claims STANDS.

### **Argument 3**

As amended, claim 1 includes the feature of "receiving a goal, the goal in a specific task being associated with a training objective of a student in a business simulation application" and "adjusting the feedback based on progress of the student toward the goal to help the student complete a business deliverable." (Emphasis added.) The specified scope of "goal" is "in a specific task" and the specified scope of "training objective of a student" is "in a business simulation application." Moreover, the claim is directed to a practical application with a "specific task," a "business simulation application," and a "business deliverable."

As stated with respect to Applicant's **Argument 2** above, none of these additions is a limitation to a practical application...they are merely abstract references to myriad unspecified (i.e., unlimited) practical applications. The abstract reference to a "goal" does not limit the claims to any specific type of goal. (e.g., winning a game, completing a negotiation, acquiring a certain amount of money, etc.) likewise, the words "training objective" do not limit to a practical application either. Is it training for flying a plane? For running a nuclear plant? For winning a game? There are no limitations to specify this. Each of these is a different invention where the only thing they have in common is the underlying algorithm that Applicant seeks to patent. Further, a "business deliverable" is not statutory either. There is no limitation making sure that the deliverable is data representing the real world...much less within public policy. Applicant's claims are so abstract, that applications of the algorithm that are against public policy are within the claim scope...there is no guarantee that the "business deliverable is even legal with respect to criminal statutes. If Applicant had specified that the "business goal" is, for instance, completing certain stock broker tasks like analyzing a market and making an accurate recommendation to a client as to whether to spend discrete dollar values on

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some stocks....then yes, there would be a limitation that clarified whether the invention is statutory...or even whether it is against public policy.

Applicant has not, as of yet added, statutory limitations to the claims, so the claims remain non-statutory and the rejections of those claims STANDS.

#### **Argument 4**

However, claim 1 is directed "to help the student complete a business deliverable" and consequently specifies the desired effect.

This is a conclusory statement.

A "business deliverable" can be anything. It can be a pure number; it can be abstract things; it can be illegal things that are against public policy. That phrase does not limit the claims to practical applications. The rejection of claim 1 STANDS.

#### **Argument 5**

While Applicant is canceling claim 10 without prejudice, claim 10 is directed to statutory matter for at least the reasons presented for Argument 3.

This is another conclusory statement. Further, Applicant failed to be persuasive in his previous arguments regarding what he summarily labels to be statutory matter. His attempt to use those arguments as a rationale for allowing these claims is unpersuasive. The rejection of claim 10 STANDS.

#### **Argument 6**

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Claim 19 is directed to statutory material for at least the reasons presented for Argument 3.

Applicant failed to be persuasive in his previous arguments regarding what he summarily labels to be statutory matter. His attempt to use those arguments as a rationale for allowing these claims is unpersuasive. The rejection of claim 19 STANDS.

### **Argument 7**

As previously discussed, Applicant is amending claims 1, 19, and 37 to clarify what is being claimed. For example, claim 1 includes the feature of "receiving a goal, the goal in, a specific task being associated with a training objective of a student in a business simulation application." In Applicant's response to the Office Action mailed July 27, 2005, the words of the Claim must be given their Plain meaning unless Applicant has provided a clear definition in the specification in accordance with MPEP §2111.01. (Applicant notes that MPEP §2111.01 refers to "their plain meaning" and not "the plain meaning".) For example, a plain meaning of "associate" is "following or accompanying; concomitant." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) Moreover, as discussed with Argument 3, the claims are limited to practical applications. Applicant believes that the words of claim 1, as amended and in accordance with their plain meaning, are clear and limit the claims to statutory subject matter.

Applicant failed to be persuasive in his previous arguments regarding what he summarily labels to be statutory matter. His attempt to use those arguments as a rationale for allowing these claims is unpersuasive. The rejection of the claims STAND.

### **Argument 8**

While Applicant is canceling claim 10 without prejudice, the issues presented by the Office Action are similar to the issues presented in Argument 12. Applicant respectfully notes that claim 10 includes the feature of "logic that integrates information that motivates accomplishment of the goal." The Office Action is altering the feature by referring to motivating student through a goal. Moreover, the Office Action appears to equate the meaning of "impel" to "flinging" or

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"catapulting" even though "impel" is commonly understood to denote "to urge to action." (The American Heritage College Dictionary, Third Edition, Houghton Mifflin Company.) As will be discussed, Applicant is amending claims 1, 19, and 37 to clarify what is being claimed.

Applicant asserted that he was using "motivation" in a way that should be interpreted as a "physical" process (and used the synonym "impel".)

There are only two possibilities in the "plain meaning" of the word "motivate". First, there is a motivation that is merely a change in mental state. A person need not move a hair's breadth in order to achieve this state...it is all mental processing...it is a desire. If this kind of "motivation" is a physical property, Examiner would like to see an example where an object that is not alive is similarly "motivated."

It doesn't happen. Objects that are not alive cannot be "motivated" in that way because they do not have mental states.

The second meaning of "motivate" (or "impel") is to throw, fling, or catapult. This is a physical process that requires no mental states. Applicant insists that he is using the word "motivate" in the physical sense, but that would mean that Applicant's invention is flinging or catapulting students to a "goal"...as if they are soccer balls or hockey pucks. As Examiner does not believe Applicant intends to fling students to a goal...but to motivate them psychologically.

Hmmm, motivate them to do...what? Display a pure number? Perform an act that is against public policy? Applicant has not placed limitations in the claims to determine what the practical application actually is. Therefore, they violate §101. The rejections STAND.



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On a side note, Applicant adamantly argues that the invention has nothing to do with creating the mental state of "motivation" and that the invention pertains to a physical interpretation of that word. That raises issues regarding In re Festo. Applicant's own arguments throughout the response raise an issue called the doctrine of "argument-based estoppel"... as discussed in In re Festo. Here is a paragraph from that case:

Our answer to this question is consistent with the doctrine of argument-based estoppel. Arguments made voluntarily during prosecution may give rise to prosecution history estoppel if they evidence a surrender of subject matter. E.g., KCJ Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1359-60, 55 USPQ2d 1835, 1841-42 (Fed. Cir. 2000) (concluding that "KCJ's statements [during prosecution] reflect a clear and unmistakable surrender" of subject matter that cannot be reclaimed through the doctrine of equivalents); Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1252-53, 54 USPQ2d 1711, 1719 (Fed. Cir. 2000) (finding that "through [Bayer's] statements to the PTO and the declarations it filed, Bayer made statements of clear and unmistakable surrender of subject matter" which it could not recapture through the doctrine of equivalents); Pharmacia & Upjohn, 170 F.3d at 1377, 50 USPQ2d at 1036 ("A number of activities during prosecution may give rise to prosecution history estoppel, ...including arguments made to obtain allowance of the claims at issue." (citation omitted)); Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1583, 34 USPQ2d 1673, 1682 (Fed. Cir. 1995) ("Clear assertions made during prosecution in support of patentability, whether or not actually required to secure allowance of the claim, may ... create an estoppel."); Texas Instruments Inc. v. United States Int'l Trade Comm'n, 988 F.2d 1165, 1174, 26 USPQ2d 1018, 1025 (Fed. Cir. 1993) (holding that arguments made during prosecution that emphasized one feature of the invention estopped the patent holder from asserting that a device lacking that feature infringed the patent under the doctrine of equivalents).

Here is a further quote from that case:

Prosecution history estoppel is one tool that prevents the doctrine of equivalents from vitiating the notice function of claims. Charles Greiner & Co. v. Mari-Med Mfg., Inc., 962 F.2d 1031, 1036, 22 USPQ2d 1526, 1529-30 (Fed. Cir. 1992). Actions by the patentee, including claim

amendments and arguments made before the Patent Office, may give rise to prosecution history estoppel. Pharmacia & Upjohn Co. v. Mylan Pharms., Inc., 170 F.3d 1373, 1376-77, 50 USPQ2d 1033, 1036 (Fed. Cir. 1999). "Prosecution history estoppel precludes a patentee from obtaining under the doctrine of equivalents coverage of subject matter that has been relinquished during the prosecution of its patent application." Id. at 1376, 50 USPQ2d at 1036. Therefore, "[t]he doctrine of equivalents is subservient to ... [prosecution history] estoppel." Autogiro Co. v. United States, 384 F.2d 391, 400-01, 155 USPQ 697, 705 (Ct. Cl. 1967). The logic of prosecution history estoppel is that the patentee, during prosecution, has created a record that fairly notifies the public that the patentee has surrendered the right to claim particular matter as within the reach of the patent.

Since, by Applicant's adamant request, the word "motivate" is not intended to be a mental state, a reasonable person might say that Applicant has surrendered that interpretation of the word and only the physical interpretation (the flinging or catapulting interpretation) actually applies.

Well, such doctrine of equivalents issues are only really decided in a court after allowance of a case. Examiner is simply making the record clear as to the course of Applicant's argument and the possible resultant scope of the claims based on Applicant's course of argument.

Examiner addresses this issue in order to simply outline an avenue by which it can be made clear on the record exactly what the word "motivate" actually means and whether more is needed to add statutory material to the claims.

That is, if a Court decides that Applicant has not surrendered the psychological interpretation of "motivate" under In re Festo, then the interpretation will have been clearly adjudicated in favor of what Examiner has been saying all along with respect to §101...that "motivate" is a mere mental state that does not add statutory material to the claim.

On the other hand, if the Court decides the other way...that the psychological interpretation is surrendered under Festo, then Applicant will have successfully argued for an invention that physically impels students to a goal (i.e., a student catapult.)

In this way, Examiner simply outlines an avenue by which it can be made clear on the record exactly what the word "motivate" actually means and whether more is needed to add statutory material to the claims.

#### **Argument 9**

The issues presented by the Office Action are addressed with the discussion for Argument 3.

Applicant failed to be persuasive in his previous arguments regarding what he summarily labels to be statutory matter. His attempt to use those arguments as a rationale for allowing these claims is unpersuasive. The rejections of the claims STAND.

#### **Argument 10**

The issues presented by the Office Action are addressed with the discussion for Argument 3.

Applicant failed to be persuasive in his previous arguments regarding what he summarily labels to be statutory matter. His attempt to use those arguments as a rationale for allowing these claims is unpersuasive. The rejections of the claims STAND.

#### **Argument 11**

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As discussed with Argument 9, the claims are n o t directed t o a mental state of a student. In order to clarify what is being claimed, Applicant is amending claim to include the feature of "integrating information that motivates accomplishment of the goal by the student."

Applicant asserted that he was using "motivation" in a way that should be interpreted as a "physical" process (and used the synonym "impel".)

There are only two possibilities in the "plain meaning" of the word "motivate". First, there is a motivation that is merely a change in mental state. A person need not move a hair's breadth in order to achieve this state...it is all mental processing...it is a desire. If this kind of "motivation" is a physical property, Examiner would like to see an example where an object that is not alive is similarly "motivated."

It doesn't happen. Objects that are not alive cannot be "motivated" in that way because they do not have mental states.

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Hmmm, motivate them to do...what? Display a pure number? Perform an act that is against public policy? Applicant has not placed limitations in the claims to determine what the practical application actually is. Therefore, they violate §101. The rejections STAND.

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On a side note, Applicant adamantly argues that the invention has nothing to do with creating the mental state of "motivation" and that the invention pertains to a physical interpretation of that word. That raises issues regarding In re Festo. Applicant's own arguments throughout the response raise an issue called the doctrine of "argument-based estoppel"... as discussed in In re Festo. Here is a paragraph from that case:

Our answer to this question is consistent with the doctrine of argument-based estoppel. Arguments made voluntarily during prosecution may give rise to prosecution history estoppel if they evidence a surrender of subject matter. E.g., KCJ Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1359-60, 55 USPQ2d 1835, 1841-42 (Fed. Cir. 2000) (concluding that "KCJ's statements [during prosecution] reflect a clear and unmistakable surrender" of subject matter that cannot be reclaimed through the doctrine of equivalents); Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1252-53, 54 USPQ2d 1711, 1719 (Fed. Cir. 2000) (finding that "through [Bayer's] statements to the PTO and the declarations it filed, Bayer made statements of clear and unmistakable surrender of subject matter" which it could not recapture through the doctrine of equivalents); Pharmacia & Upjohn, 170 F.3d at 1377, 50 USPQ2d at 1036 ("A number of activities during prosecution may give rise to prosecution history estoppel, ...including arguments made to obtain allowance of the claims at issue." (citation omitted)); Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1583, 34 USPQ2d 1673, 1682 (Fed. Cir. 1995) ("Clear assertions made during prosecution in support of patentability, whether or not actually required to secure allowance of the claim, may ... create an estoppel."); Texas Instruments Inc. v. United States Int'l Trade Comm'n, 988 F.2d 1165, 1174, 26 USPQ2d 1018, 1025 (Fed. Cir. 1993) (holding that arguments made during prosecution that emphasized one feature of the invention estopped the patent holder from asserting that a device lacking that feature infringed the patent under the doctrine of equivalents).

Here is a further quote from that case:

Prosecution history estoppel is one tool that prevents the doctrine of equivalents from vitiating the notice function of claims. Charles Greiner & Co. v. Mari-Med Mfg., Inc., 962 F.2d 1031, 1036, 22 USPQ2d 1526, 1529-30 (Fed. Cir. 1992). Actions by the patentee, including claim

amendments and arguments made before the Patent Office, may give rise to prosecution history estoppel. Pharmacia & Upjohn Co. v. Mylan Pharms., Inc., 170 F.3d 1373, 1376-77, 50 USPQ2d 1033, 1036 (Fed. Cir. 1999). "Prosecution history estoppel precludes a patentee from obtaining under the doctrine of equivalents coverage of subject matter that has been relinquished during the prosecution of its patent application." Id. at 1376, 50 USPQ2d at 1036. Therefore, "[t]he doctrine of equivalents is subservient to ... [prosecution history] estoppel." Autogiro Co. v. United States, 384 F.2d 391, 400-01, 155 USPQ 697, 705 (Ct. Cl. 1967). The logic of prosecution history estoppel is that the patentee, during prosecution, has created a record that fairly notifies the public that the patentee has surrendered the right to claim particular matter as within the reach of the patent.

Since, by Applicant's adamant request, the word "motivate" is not intended to be a mental state, a reasonable person might say that Applicant has surrendered that interpretation of the word and only the physical interpretation (the flinging or catapulting interpretation) actually applies.

Well, such doctrine of equivalents issues are only really decided in a court after allowance of a case. Examiner is simply making the record clear as to the course of Applicant's argument and the possible resultant scope of the claims based on Applicant's course of argument.

Examiner addresses this issue in order to simply outline an avenue by which it can be made clear on the record exactly what the word "motivate" actually means and whether more is needed to add statutory material to the claims.

That is, if a Court decides that Applicant has not surrendered the psychological interpretation of "motivate" under In re Festo, then the interpretation will have been clearly adjudicated in favor of what Examiner has been saying all along with respect to §101...that "motivate" is a mere mental state that does not add statutory material to the claim.

On the other hand, if the Court decides the other way...that the psychological interpretation is surrendered under Festo, then Applicant will have successfully argued for an invention that physically impels students to a goal (i.e., a student catapult.)

In this way, Examiner simply outlines an avenue by which it can be made clear on the record exactly what the word "motivate" actually means and whether more is needed to add statutory material to the claims.

### **Argument 12**

Claim 1 is not directed to a mental state of the student but rather is directed to an effect on the student as provided for example by the system shown in Figure 2. Claim 19 is amended to \*\*\* by the user in a simulated environment goal for use in the presentation," Claim 37 is amended to include the similar feature of "integrating information that provides assistance with achieving the goal, by the plurality of students, into a tutor for use in the presentation." (asterixes added because that line in the FAX is unreadable.)

Applicant asserted that he was using "motivation" in a way that should be interpreted as a "physical" process (and used the synonym "impel".)

There are only two possibilities in the "plain meaning" of the word "motivate". First, there is a motivation that is merely a change in mental state. A person need not move a hair's breadth in order to achieve this state...it is all mental processing...it is a desire. If this kind of "motivation" is a physical property, Examiner would like to see an example where an object that is not alive is similarly "motivated."

It doesn't happen. Objects that are not alive cannot be "motivated" in that way because they do not have mental states.

The second meaning of "motivate" (or "impel") is to throw, fling, or catapult. This is a physical process that requires no mental states. Applicant insists that he is using the word "motivate" in the physical sense, but that would mean that Applicant's invention is flinging or catapulting students to a "goal"...as if they are soccer balls or hockey pucks. As Examiner does not believe Applicant intends to fling students to a goal...but to motivate them psychologically.

Hmmm, motivate them to do...what? Display a pure number? Perform an act that is against public policy? Applicant has not placed limitations in the claims to determine what the practical application actually is. Therefore, they violate §101. The rejections STAND.

On a side note, Applicant adamantly argues that the invention has nothing to do with creating the mental state of "motivation" and that the invention pertains to a physical interpretation of that word. That raises issues regarding In re Festo. Applicant's own arguments throughout the response raise an issue called the doctrine of "argument-based estoppel"... as discussed in In re Festo. Here is a paragraph from that case:

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Since, by Applicant's adamant request, the word "motivate" is not intended to be a mental state, a reasonable person might say that Applicant has surrendered that interpretation of the word and only the physical interpretation (the flinging or catapulting interpretation) actually applies.

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That is, if a Court decides that Applicant has not surrendered the psychological interpretation of "motivate" under In re Festo, then the interpretation will have been clearly adjudicated in favor of what Examiner has been saying all along with respect to §101...that "motivate" is a mere mental state that does not add statutory material to the claim.

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In this way, Examiner simply outlines an avenue by which it can be made clear on the record exactly what the word "motivate" actually means and whether more is needed to add statutory material to the claims.

### **Argument 13**

The issues presented by the Office Action are addressed with the discussion for Argument 3.

Applicant failed to be persuasive in his previous arguments regarding what he summarily labels to be statutory matter. His attempt to use those arguments as a rationale for allowing these claims is unpersuasive. The rejections of the claims STAND.

#### **Argument 14**

While Applicant is canceling claims 10, 28, and 46 without prejudice, claims 10, 28, and 46 is directed to statutory matter for at least the reasons presented for Argument 3.

Applicant failed to be persuasive in his previous arguments regarding what he summarily labels to be statutory matter. His attempt to use those arguments as a rationale for allowing these claims is unpersuasive. The rejections of the claims STAND.

#### **Argument 15**

As previously discussed Applicant is amending claim 1 to include the feature of "receiving a goal, the goal in a specific task being associated with a training objective of a student in a business simulation application." As amended, the claim limits the scope of the invention and clearly does not include a goal of a "basket hoop" or a "finish line tape." Independent claim 19 includes a similar feature of "presenting information indicative of a goal, the goal in a specific task being associated with a training objective of a student in a business simulation application. Also, claim 37 is amended to include the feature of "receiving indicia representative of a goal into a model, the goal in a specific task being associated with a training objective of a plurality of students in a business simulation application." Applicant respectfully submits that the claims are definite and distinct in claiming the subject matter that Applicant regards as the invention in light of the plain meanings of the words. Applicant requests reconsideration of claims 1-9, 19-27, and 37-45.

Applicant makes the claim more abstract than the others. Instead of claiming "motivation" of the student toward a goal, the goal is merely "associated" with the a "training objective".

Examiner interprets "training objective" to be broad enough to include student "motivation", among other things. In that light, the same problem that exists in the other claims exists here. For Applicant's convenience, the explanation will be repeated yet again here:

Applicant asserted that he was using "motivation" in a way that should be interpreted as a "physical" process (and used the synonym "impel".)

There are only two possibilities in the "plain meaning" of the word "motivate". First, there is a motivation that is merely a change in mental state. A person need not move a hair's breadth in order to achieve this state...it is all mental processing...it is a desire. If this kind of "motivation" is a physical property, Examiner would like to see an example where an object that is not alive is similarly "motivated."

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through the doctrine of equivalents); Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1252-53, 54 USPQ2d 1711, 1719(Fed. Cir. 2000) (finding that “through [Bayer’s] statements to the PTO and the declarations it filed, Bayer made statements of clear and unmistakable surrender of subject matter” which it could not recapture through the doctrine of equivalents); Pharmacia & Upjohn, 170 F.3d at 1377, 50 USPQ2d at 1036 (“A number of activities during prosecution may give rise to prosecution history estoppel, ...including arguments made to obtain allowance of the claims at issue.”(citation omitted)); Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1583, 34 USPQ2d 1673, 1682(Fed. Cir. 1995) (“Clear assertions made during prosecution in support of patentability, whether or not actually required to secure allowance of the claim, may ... create an estoppel.”); Texas Instruments Inc. v. United States Int’l Trade Comm’n, 988 F.2d 1165, 1174, 26 USPQ2d 1018, 1025 (Fed. Cir. 1993) (holding that arguments made during prosecution that emphasized one feature of the invention estopped the patent holder from asserting that a device lacking that feature infringed the patent under the doctrine of equivalents).

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***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

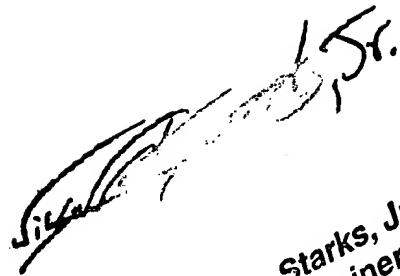
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**S. P. E. David Vincent** (571) 272-3080

**Official (FAX)** (571) 273-8300

WLS

26 May 2006

A handwritten signature in black ink, appearing to read "Wilbert L. Starks, Jr.", written diagonally across the page.

Wilbert L. Starks, Jr.  
Primary Examiner  
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